

**In the Claims:**

1. – 14. (canceled)

15. (currently amended) A procedure to leach ~~ore and~~ copper flotation concentrates of ~~copper on~~ in a gravel heap, comprising the steps of:

artificially adhering the concentrate to the surface of a solid material [[base]],  
wherein said solid material is selected from the group of materials consisting of which  
~~can be an artificial~~ a rocky material [[, or]] and a stony plastic material substance, to form  
~~an agglutinate~~ a chemically adhered agglomerated material;

stockpiling the ~~agglutinated~~ chemically adhered agglomerated material to form a  
leaching [[pile]] heap; and

leaching irrigating the ~~leaching~~ heap [[pile]] with a leaching solution containing at  
least Cl, Cu, and Fe ions.

16. (currently amended) The procedure according to claim 15, ~~wherein the agglutination~~  
~~stage comprises the steps of~~ further comprising the steps of: simultaneously mixing  
of [[:]

the ~~gravel~~ rocky material having a [[of]] size typically ~~no greater~~ less than 3/4  
inch with a copper concentrate in a weight fraction up to 20 % to form a mixture of rocky  
material and copper concentrate;

~~in the agglutination stage~~, adding a calcium chloride solution [[,]] containing 22 to  
250 grams of chloride per liter of solution to the mixture of rocky material and copper  
concentrate [[,]] in a proportion of 5 to 250 kilos of calcium chloride per ton of  
concentrate; and

~~in the agglutination stage,~~ adding a second solution containing sulfate ~~[[ion]]~~ ions  
to the mixture of rocky material and copper concentrate~~[[,]]~~ in a proportion of 5 to 70  
kilos of sulfate per ton of ~~agglutinate~~ mixture; ~~[[and]]~~

wherein the final ~~agglutinate~~ mixture has a moisture content between 35 to 130  
kilos per ton of ~~[[base]]~~ rocky material in dry basis.

17. (currently amended) The procedure according to claim 16 wherein the ~~gravel~~ rocky  
material size is no greater than ½ inch.

18. (currently amended) The procedure according to claim 16 wherein the ~~gravel~~ rocky  
material size is no greater than 3/8 inch.

19. (currently amended) The procedure according to claim 16 and further including the  
step of adding a water flow to the ~~final agglutinate~~ mixture in order to get a moisture  
content between 35 to 130 kilos per ton of ~~base-material~~ mixture.

20. (currently amended) The procedure according to claim 16, wherein the calcium  
chloride solution is prepared with a ~~type of~~ water selected from the group consisting of  
pure water, industrial water, treated sewage water, sea water and saline water.

21. (currently amended) The procedure according to claim 16, wherein the second  
solution containing ~~[[the]]~~ sulfate ions is sulfuric acid, with a concentration in weight  
ranging from 14 to 98%.

22. (currently amended) The procedure according to claim ~~[[16]]~~ 15, wherein said rocky  
~~gravel are formed by a~~ material is selected from the group consisting of an ore, ~~[[or]]~~ a  
barren mining rock material, a discarded ore ~~or rock, gravel, leaching gravel and pebble a~~  
leached ore.

23. (previously presented) The procedure according to claim 16, wherein the concentrate is replaced by a material selected from the group consisting of a copper tailing, a copper precipitate and any other dusty material containing copper values.

24. (currently amended) The procedure according to claim 16, wherein the concentrate comprises copper in the form at least one compound selected from the group consisting of chalcocite, coveline, covellite, bornite and chalcopyrite, ~~copper species~~.

25. (canceled)

26. (currently amended) The procedure to leach copper concentrates on a ~~gravel pile~~, non-flooded heap, according to claim 16, and further including the steps of:

letting the heap rest ~~letting a pile composed of the copper concentrates~~  
~~agglutinated on the gravel pile rest~~ for a period ranging from 15 to 90 days;

leaching the heap during a leaching stage by ~~leaching the pile with~~ a leaching solution, at a flow rate of 5 to 100 lt/m<sup>2</sup>hr for a period ranging from 50 to 300 days; and

once the leaching stage has finished, washing the heap with a washing solution  
[[pile]] at a flow rate of 5 to 100 lt/m<sup>2</sup>hr for a period ranging from 1 to 30 days, ~~once the leaching stage has finished~~.

27. (currently amended) The procedure to leach copper concentrates, agglomerated according to claim 16, on a non-flooded heap according to claim 26, wherein the leaching solution contains between 0.5 and 10 g/lt of copper, between 50 and 120 g/lt of chloride, and 5 to 25 g/lt of equivalent sulfuric concentration.

28. (currently amended) The procedure according to claim 26, wherein the leaching solution is formed from ~~intermediate~~ a mixture of pregnant and raffinate solutions of the process.

29. (currently amended) The procedure according to claim 26, wherein the calcium chloride added in the agglomeration stage contributes part or all of the chlorine of the leaching solution ~~is contributed by the calcium chloride added in the agglutination stage~~.

30. (currently amended) The procedure according to claim 26, wherein the washing solution is ~~selected from the group consisting of pure water, industrial water, sea water and raffinate solution~~.

31. (previously presented) The procedure according to claim 30, wherein the raffinate solution contains between 0 and 1 g/lit of copper, between 60 and 130 g/lit of chloride, and 10 to 40 g/lit of equivalent sulfuric acid concentration.

32. (new) The procedure according to claim 15, wherein the plastic material are a polyethylene sphere packing.